

APPENDIX C
THE REGULATOR'S HANDBOOK

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William C. Jennings

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by

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A NOTE TO THE READER

This handbook presents some of the philosophic and procedural principles which I have found to underlie governmental regulatory programs. My firsthand experience is limited to safety regulations, but the general principles are equally applicable to other regulatory programs.

I resigned from government services last year after eight years in various regulatory programs, covering air, land, sea, and pipeline modes of transportation. I first served as Executive Director of the Regulatory Council of the Federal Aviation Agency then as Chairman of the Hazardous Materials Regulations Board in the Department of Transportation; while serving in the latter capacity. I was also Director of the Office of Hazardous Materials and Acting Director of the Office of Pipeline Safety. Before joining the Federal government, I worked for more than seven years in a highly regulated industry as Director-Corporate Law for Western Air Lines. Thus the principles stated in this handbook are confirmed by my own experience on both the government and industry sides of the table.

While I now take the initiative in collecting and articulating them, I am but one of the developers of these principles. They are the product of discussion among knowledgeable people in and out of government. I cannot name everyone whose contributions are reflected here, but I must give special credit to James B. Minor and Fred J. Emery whose trusted counsel was a boon to me and other administrators of the various regulatory programs in the Department of Transportation.

Each of my governmental positions had been recently created when I was appointed to it, so there was not much written guidance. In fact, part of my assignment in each case was to develop policies and procedures for performing the function. Reviewing my government service at the time I resigned, I found that the written instructions I had issued were nothing to be proud of. So, as my valediction to government services, I decided to write this handbook. My associates of recent years will readily recognize it as a collection of the bits and pieces of advice and instructions I gave orally through the years.

At the risk of appearing unscholarly, I have not supported the text with footnotes, because footnoting would be counterproductive. The theme of the handbook is that many regulatory agencies should change some of their present policies and procedures. I have described the problem areas in general terms without supporting specifics. Citing examples in footnotes would probably make the administrators of the cited programs feel defensive about their present practices. These administrators would be less receptive to a suggestion to adopt new practices, if the suggestion started off by putting them in the position of having to defend present practices. I have identified these problem areas through years of personal observation of many programs plus reading the Federal Register, where most regulatory agencies finally gave the public a look at their practices.

The two principal types of administrative agency actions are generally described as adjudicative and legislative in nature. Congress has prescribed different procedures for these actions, as discussed in detail in the Attorney General's Manual on the Administrative Procedure Act. By ignoring the intricacies, it is easy to highlight the differences in the procedures.

Adjudicative action by an administrative agency is similar in many ways to a trial in a court. The agency holds a formal hearing and then bases its decision on evidentiary facts which are made a matter of record by the testimony of witnesses who are subject to cross-examination by interested parties. The agency applies predetermined standards in deciding what will be done under the specific set of facts.

Adjudicative actions usually deal with the grant or denial of rights or benefits, such as licenses. This handbook does not deal with adjudicative actions.

Legislative action by an administrative agency is similar in many ways to enactment of a law by Congress. The agency issues regulations prescribing what may, or may not, be done in the future by those subject to its authority. The rulemaking procedures are informal. The agency is free to collect information in any way and from any source without any requirement for cross-examination or other validation of the information. The agency need not base its regulations on a factual record; it may rely on its own experience and expertise in deciding what regulations to adopt. About the only formal requirement is that, before issuing a regulation, the agency must publish a notice of proposed rule making and give the public an opportunity to comment on the proposal.

Lest someone misread my intent in pointing up the lack of procedural requirements in legislative actions, I must say that I do not believe that more procedural requirements would produce better regulations. In fact, more formalized procedures would probably have a negative effect by giving the regulated some procedural devices with which to prevent agency action. Improvement in a regulatory program lies not in procedural requirements, but in the regulator's desire to better serve the public. This handbook suggests some philosophic concepts and management devices to help the regulator who has that desire.

These few words need definition as to their use in this text:

Agency means an administrative agency which takes legislative action, since the handbook does not purport to cover those agencies which take adjudicative action. In multi-purpose agencies, it means only the regulatory function within that agency.

Regulator means the person in an agency who has authority to issue a regulation. It may be the head of the agency or some subordinate to whom he has delegated signature authority. Regulator is sometimes used to personify the regulatory function, encompassing the staff as well as the regulator himself, treating the staff as an extension of the regulator.

Regulation means a requirement (including a negative requirement, or prohibition) of general applicability; that is, it applies equally to all similarly situated persons. It may be used in a plural as well as a singular sense, ranging all the way from a one-line requirement to a whole body of requirements on a single subject. Each new regulation is usually an addition to, or change in, an existing regulation.

Regulated (when used as a noun) means those who are subject to a regulation. They may be individuals, partnerships, or corporations, including the individual employees who perform regulated functions.

With thanks to those who helped develop these principles, I dedicate this book to those regulators who are more interested in doing a job than in keeping a job.

June 1971

William C. Jennings

A. SOME UNDERLYING CONCEPTS

1. A REGULATION IS A LAW

What is a regulation? The answer to this question should permeate agency lore, but it frequently receives only scant attention. Many people in regulatory agencies, at times even the regulator himself, do not appreciate the legal effect of the regulations they issue. They may fail to distinguish between those things which are critical (regulations) and those which are desirable (advisories). They sometimes act as though regulations were contracts to be negotiated with the regulated or shields published to protect the agency from criticism.

Within the limits of the authority delegated to him, the regulator makes the regulations which Congress would make if it had the time and talent. A regulation is a law. A regulation has as much legal effect as if it had been passed by Congress and signed by the President.

A regulation is a legally enforceable requirement, whether stated in the affirmative or negative. It may require performance of an act, or it may require that an act (if performed) be performed in a stated way. It may prohibit an act altogether, or it may prohibit an act under stated circumstances. Whether affirmative or negative, a regulation is mandatory, not precatory. The agency may publish advisory material in support of its regulatory mission, but those subject to its regulation do not have to follow its advice.

Some agencies do not make a clear distinction between regulation and advice. They publish a hodgepodge of material (regulations, notices, orders, bulletins, standards, instructions, advisories, permits, etc.) without identification of those which have the force of law. Without this identification, those who must comply with the regulations may not be able to determine which material must be obeyed as law and which may be treated as advice. The agency's employees who are charged with getting compliance with the regulations may be similarly confused. In the interest of orderly administration of its programs, the agency must first discipline itself to distinguish between regulatory material and advisory material and then publish them separately.

The agency's mission is to protect the public from the things which the regulated industry might do if there were no governmental intervention. Many agency functionaries compromise their effectiveness by a too-close relationship with the regulated. The relationship is too close when those subject to regulation question the right of the regulator to make unilateral decisions or when the regulatory staff forgets that the function of the agency is to protect the public, not the regulated. The agency cannot function effectively without the active participation of the regulated in the regulatory processes, so close cooperation is required. But the regulator must guard against letting his position degenerate to the point of bargaining with those subject to regulation or letting their influence reach the point of controlling agency action. As it involves them in the regulatory processes, the agency must seek the cooperation of the regulated, not submit to their control.

Some regulators stumble from one crises to another, so preoccupied with building paper parapets to protect themselves from criticism that they have little thought for their governmental role. With little qualm, they dissipate agency resources genuflecting before newspaper headlines and Congressional criticism, taking superficial defensive action in response to individual accidents, imposing unnecessary burdens on the regulated just to take the heat off themselves. Regulators abuse their lawmaking authority when they put it to this use.

2. A REGULATION IS A SOLUTION TO A PROBLEM

Agencies frequently act in ever-greater detail in matters with which they are familiar, without considering whether there is need for more detailed regulation in that area. Aware of the need for a show of activity, they act on those matters with which they feel comfortable, copying from well-thumbed forms. Some agencies seem to lack a sense of direction, making no distinction between random activity and priority action on identified problems. Few agencies really focus staff energy on solving priority problems.

A regulation is a governmental solution to a problem. Until a problem has been identified, there is no need for a regulation. Until a problem has been defined, there can be no rational regulation. From the time a problem is identified until it is solved, the amount of agency effort devoted to defining and solving that problem should relate to the seriousness of that problem in relation to other identified problems.

In the absence of any better information, newspaper headlines may identify problems, but the agency is in sad shape if it has so few sources of information that it must rely on headlines to set the regulatory process in motion. The well-run agency identifies problems by analysis of information, systematically accumulated from sources such as accident and incident reports, and projection of problem potential. This does not mean that the agency should passively collect statistics and wait for the statistical evidence to grow so large that the existence of a problem is self-evident. On the contrary, the agency must constantly project the potential for occurrence of a problem, taking into account the incidents which could have been accidents and the minor accidents which could have been major under different and reasonably predictable circumstances. The agency has identified a problem when it foresees, under reasonable predictable circumstances, a threat of unacceptable harm to the public.

Some problems can be identified on the basis of common knowledge, without reference to accidents or incidents. Some years ago the Administrator of the Federal Aviation Agency noted that pioneer airline pilots were getting along in years, some past 60 years of age. Even absent accident/incident information, he knew that human faculties deteriorate with age and that these pilots were becoming progressively less capable of safe performance. Further, he could not wait for his knowledge to be confirmed by accident/incident information. Based on commonly accepted knowledge of the effect of aging, he issued a regulation prohibiting pilots from flying in airline service after age 60. Problems resulting from developments in technology may also be identified without accident/incident information, particularly the need for specialized training and qualification to handle new equipment. But with few exceptions, the best way to determine what will happen is to study what has happened, in the light of common knowledge and Murphy's Law: if it can happen, it will happen.

Once a problem is identified, the agency's next concern is to define the problem. Most regulatory programs suffer from the tendency of the regulatory staff to by-pass the definition step, attempting to go directly from identification to solution. The agency has defined the problem when, with reference to a particular kind of threat, it has reduced to writing the elements which constitute the threat. For problems relating to transportation safety, this list is illustrative:

- The number of accidents which have occurred in the past and the rate at which they are currently occurring;
- Whether the ratio of accidents is increasing: whether the number of accidents is increasing out of proportion to the increase in the volume of traffic;

- Where and under what circumstances the accidents are occurring, noting any change from historic patterns;
- The cause or causes of the accidents and, if more than one cause, the relative prevalence of each cause, noting any change from historic patterns;
- The damage resulting from each accident and whether the kind and amount of damage is greater than the historic pattern;
- A projection of the damage which may be expected in the future, based on historic patterns; and
- A projection of the maximum damage which might reasonably result from an accident of this kind and probability that such an accident might occur.

The regulator may take emergency action on less information than this, but he should promptly complete the definition process to test the validity of his action. And he should not hesitate to amend the emergency action, if the additional study shows that amendment is in the public interest. A regulator should never hesitate to amend any regulation in the public interest, particularly an emergency regulation which is necessarily issued on less than complete information. Most so-called emergencies arise out of either a failure to take timely action on available information or some technologic development which the regulations do not accommodate. An alert agency will never permit either of these “emergencies” to arise.

Once the problem is defined, the regulator and his staff are ready to address themselves to a solution-and not one minute earlier. The solution may be a regulation, advisory material, or other action, but it cannot be devised until the problem is defined. Some may view problem definition as an impediment to regulation; quite the contrary, it is a requisite-at least to rational regulation. Undoubtedly there will be those who use the requirement for problem definition as an excuse for failure to regulate. But they would have found some other excuse, if there had not been this one.

Most problems may be solved in more than one way. (This cautionary note: most regulatory solutions are but ameliorations.) The regulator should search for all possible solutions, make a cost/benefit analysis of each, and adopt the solution which he deems to give the public the best protection, within the limits of technical feasibility and economic practicability. Ultimately, this is a matter of the regulator’s judgment.

To illustrate, consider the problem created by the escape of chemicals from railroad tankcars when they are ruptured after a derailment, a major factor in Congress’ decision to pass the Federal Railroad Safety Act of 1970. The solution lies in reducing the frequency with which individual tankcars are ruptured and in reducing the number of tankcars ruptured in any one derailment. While most of the headlines concern accidents in which great quantities of chemicals were released, the rupture of a single tankcar of such commonplace chemicals as chlorine or anhydrous ammonia could cause a catastrophe. The Administrator of the Federal Railroad Administration will have a number of regulatory alternatives to consider in solving this problem. For illustration only, not as the end product of the identification/definition/solution process, these might be the alternatives:

- Require better maintenance of roadbeds and running gear (trucks, wheels, and axles) to reduce the number of derailments;

- Require better couplers on all cars to reduce the danger of tankcars being struck and ruptured after a derailment; and
- Require that tankcars be shielded to reduce the number of punctures even when the cars strike each other.

The first alternative might be more expensive and would be borne almost entirely by the railroads, but note that the benefit runs to the whole railroad operation, not just to the tankcars. The second alternative might be second most expensive and would be borne in part by the shippers who own the tankcars; it would not prevent derailments, but in case of derailment it would decrease the damage to the whole train, not just to tankcars. The third alternative would not prevent derailments and would protect only tankcars in case of derailment; the cost would be borne largely by the shippers who own most of the tankcars. Requiring all three would do the most to prevent the escape of chemicals, but the Administrator has to consider the economic practicability of any proposed regulation. How much money do the railroads and the shippers have to spend on this problem? Would the cumulative benefit of all three proposals be great enough to justify the additional cost of adopting more than one of them? Since any transportation cost is ultimately passed along to the shipper, would the added cost cause shippers to divert any of the chemicals to truck transport? If so, would public safety be enhanced by having the chemicals move by truck? Assuming that the third alternative is less effective than either the first or second and assuming that the railroads show that they do not have the money to comply with either the first or second alternatives (as the largest, the Penn Central, could probably show), the regulator would then have to issue the least effective alternative as a regulation, because it is the one which is economically practicable. This illustrates the central fact of this kind of regulation: money is the principal limiting factor.

3. NO PROBLEM, NO NEED FOR REGULATION

The books are full of regulations which are there because “they’re already doing it anyway, so it won’t be any burden on anybody” or “we’ve got to do something, because we’re getting a lot of static, and this is about the most innocuous thing we can do.” Or maybe some staff member started writing regulations long ago in some specialized field-and no one has ever questioned whether there is a continuing need for more regulation in that field.

If there is no problem, there is no need for a regulation. The regulator should not adopt a regulation simply because someone asked him to do so. Nor should he act on the assumption that those subject to this regulation will act irresponsibly.

This chapter is a corollary to the preceding chapter. If the regulator does not keep in mind the problem/solution nature of the regulatory function, he will divert his agency’s resources from priority projects and saddle those whom he regulates with ill-conceived or unnecessary requirements.

When the regulator ignores the problem/solution relationship, he may be trapped into adopting a regulation which gives one member of a regulated industry a competitive advantage over other members. Many examples may be found among the present transportation regulations. Though public safety was their stated purpose, many of these requirements were developed and proposed by regulated companies-and similar requirements are still being proposed-for no reason but competitive advantage. The regulator cannot obligingly adopt everything which is wrapped in safety rhetoric. He must be as diligent in avoiding an unnecessary regulation as he is in developing necessary regulations.

If an industry acts so carefully that it does not threaten risk of harm to the public, there is no need for governmental intervention to protect the public from that industry’s acts. This concept is clearly shown in the legislative history of the National Traffic and Motor Vehicle Safety Act of 1966 (15 U.S.C. 1381). If the automobile manufacturers had spent as much money on safety as they spent on style, they probably would not be subject to regulation today, because there would be no need for regulation. Since absolute safety is not attainable, the regulator must exercise his judgment in determining when the actions of those whom he regulates are raising such a potential for harm to the public that regulatory action is necessary.

The regulator is concerned with potential for harm. He need not wait for the tombstone count to get so large that the existence of a problem is statistically demonstrable. Regulated groups usually argue, when opposing proposed regulatory action, that the absence of tombstones shows that there is no problem. The regulator must firmly reject any effort to limit his regulatory action to areas of statistically demonstrable need. He must retain the right to use judgment, based on probabilities and reasonably credible accidents, in deciding whether there is a problem.

The regulator should not issue regulations in anticipation of irresponsible conduct on the part of those whom he regulates. There are enough actual problems to strain the meager governmental resources devoted to regulatory matters. The regulator should devote his resources to tangible problems, not amorphous possibilities.

4. REGULATORY FUNCTIONS

Beginning in 1893 with the first safety appliance act for railroads (27 Stat. 531), Congress has passed a series of laws which provide for federal regulation of safety standards for all modes of transportation. The air and water modes and highway commercial carriers have long been regulated; automobiles, pipelines, and (with minor exceptions) railroads have been subjected to regulation only recently. The various statutes creating these authorities differ in both form and content, reflecting the differences in the modes of transportation, the relative political strength of those covered by each statute, and the social climate at the time of creation.

Though Congress has written a variety of special provisions into the different transportation safety programs, these functions are (explicitly or implicitly) common to all:

Information. The regulator has to have information as to the need for regulatory action and as to the kind of regulatory action which is needed, else his decisions will be guesswork. Accident and incident reports are the principal sources of information from the public, supplemented and verified by the agency's own field inspections. The regulator should require these reports in enough detail for him to determine the kind and number of accidents which are happening in the activities subject to this authority, the cause or causes of these accidents, and the damage to the public resulting from the accidents.

Regulation. The regulator's prime function is to issue standards for the conduct of industrial activities. The standards should provide the highest degree of protection for the public, within the limits of technical feasibility and economic practicability. Regulatory agencies have different names for their standards, such as regulations, standards, orders, notices, and permits. Congress has been equally imprecise in the use of these words in delegating authority. Regulation is the term generally used to denote a standard of general applicability.

Education. The regulator has to make sure that his regulatory requirements are known to every affected person. Knowledge is requisite to compliance.

Surveillance. After publishing regulations, the agency spot checks regulated activities to find whether those subject to the regulations are complying with the requirements and to determine whether the regulations are adequate to protect the public. While most people voluntarily comply with regulations, surveillance enhances the disposition to comply.

Enforcement. Legal enforcement action is the regulator's ultimate step in getting compliance with his regulations. The type and extent of enforcement depends largely on the disposition to voluntary compliance on the part of those subject to the regulations. The purpose of enforcement is to get compliance; enforcement is not an end in itself.

B. ORGANIZATIONAL RELATIONSHIPS

5. THE REGULATOR AND CONGRESS

Congress creates a regulatory agency to perform a delegated function, because Congress does not have the capacity to do the kind of detailed work and marshal the kind of specialized knowledge which is required to administer a particularized program. Then individual members of Congress frequently get involved in the details of administering the program.

Congress, acting through the responsible committees, has a continuing responsibility for over seeing the performance of the functions which it has delegated. Individual members of Congress do not have any responsibility for the performance of these delegated functions and do not have even colorable authority to dictate specific regulatory action. The regulator is solely responsible for his regulatory acts; he cannot share responsibility for his acts, nor can he share blame for his failures, with any member of Congress.

Congress determines the need for a regulatory program, creates the regulatory agency, delegates authority to the regulator, determines the policies and procedural safeguards under which the regulator will exercise his authority, funds the agency's activities, and maintains a continuing oversight of the agency's performance of its function. The regulator performs the functions which Congress has delegated, to the extent that they can be performed with the resources which Congress has provided. These roles are schematically distinct and independent, but the regulator learns early in his career that some members of Congress neither honor the distinction nor respect the regulator's independence.

Members of Congress frequently criticize regulatory standards upon the happening of a headline event and demand that the regulator take some sort of regulatory action immediately. Notwithstanding the self-evident fact that these comments and demands are usually based on minimal knowledge of either the regulations or the facts surrounding the event, they sometimes send the whole agency into a funk. This inordinate sensitivity to off-the-cuff Congressional comment reflects on the professionalism and the leadership of the agency. Many regulators respond to this stimulus with a flurry of band-aid activity, a palliative for Congressional concern instead of a solution for a problem.

Band-aid activity is inherently bad government. It wastes agency resources, contributing less to the safety program than the same amount of effort would have contributed in a non-panic atmosphere. Congressional oversight committees can make band-aid activity unattractive to the regulator by inquiring into the long-range validity of such quick-response actions. Systematic inquiry into the overall conduct of his program by the committee to which he regularly reports is a more effective stimulus to the regulator than sporadic demands for specific action by an individual member. Orderly procedures may not make headlines, but they make good government.

A proponent of a regulatory proposal will sometimes ask a member of Congress to intercede for him with the regulator, usually after the proponent has been unsuccessful in getting favorable action through normal regulatory channels. In some instances, usually on the basis of information furnished by the proponent, the Congressman will ask the regulator to act favorably on the proposal. From the Congressman's point of view, the request is in order, because a proponent can always couch a proposal in legitimate public-interest terms. But the proposal may be only nominally related to achieving the stated purpose; in fact, it may be designed to give the proponent a competitive advantage by requiring or authorizing the use of a device which he has but his competitors do not have.

As a matter of courtesy, the regulator should promptly review the merits of any proposal from a member of Congress. Assuming that the proposal is without merit, what weight should the regulator give to the Congressman's request for favorable action? A Congressman's request for favorable action does not lend merit to a proposal which would not have merit without the request. The regulator should not let an *ad hominem* argument influence his judgment as to the merits of the proposal. No individual member of Congress has the right to speak on any matter on behalf of the whole Congress. The regulator acts on behalf of all of Congress when he exercises his delegated authority. It would be an affront to Congress as a whole for the regulator to let an individual member influence his judgment.

Few Congressmen will arbitrarily press for regulatory action after learning of the lack of merit in a proposal. For that reason, if he cannot act favorably on a recommendation, the regulator should promptly explain to the Congressman why a recommendation cannot be honored. Even if the Congressman should persist, the regulator must exercise his own objective judgment. He owes that to the Congress, the public, the regulated industry, his agency, and himself.

6. THE REGULATOR AND THE NATIONAL TRANSPORTATION SAFETY BOARD

The National Transportation Safety Board is in the Department of Transportation, but it is not under the operational control of the Secretary. The Board has authority to investigate accidents, make safety studies, and make recommendations to prevent transportation accidents and promote transportation safety. These activities are directed at the safety programs administered by the regulatory agencies of the Department: Federal Aviation Administration, United States Coast Guard, Federal Highway Administration, Federal Railroad Administration, National Highway Traffic Safety Administration, and Office of Pipeline Safety. These agencies do not like the Board's independent appraisal of their safety programs; their inherent dislike is compounded by the legal requirement that the Board make public its accident investigation reports, safety studies, and recommendations. Predictably, the agencies are less than candid in their dealings with the Board.

Regulatory agencies in the Department of Transportation should give the National Transportation Safety Board complete access to all information which may be pertinent to the Board's functions.

Congress created the National Transportation Safety Board in 1967 to monitor the safety programs administered by the Department of Transportation. Although not under his operational control, the Board serves a quasi-staff function for the Secretary by reviewing and reporting to him the quality of administration of these programs and recommending improvements. Thus the Secretary has the benefit of an additional appraisal staff, if he chooses to view the Board's activities in that light.

All of the Board's authority was newly created in 1967, except authority over aviation safety which was transferred from the Civil Aeronautics Board. By continuing the authority over aviation safety, Congress reaffirmed the need for an independent entity to make a continuing appraisal of the Federal Aviation Administration's safety program. By creating equivalent authority over safety in other modes of transportation, Congress recognized a similar need for independent appraisal of their safety programs. Congress has amply evidenced its concern and clearly stated the Board's authority.

Regulatory agencies often tend to engage in treadmill activities, to be preoccupied with procedures, to value conformity over innovation. And the tendency usually increases with the size and age of the agency. Fortunately, it is only a tendency and can be corrected, if the agency sees the posture into which it is slumping. Unfortunately, no man can look over his own shoulder and appraise his own performance. The function of the Board is to look over the agency's shoulder, alerting the agency to the shortcomings of its program and preventing the tendency from stifling the program. To perform this function, the Board must have access to all pertinent information within the Department.

The Board has a mission and it will perform that mission—well or ill, depending largely upon the kind and quality of information available to it. While good information will not ensure good Board performance, poor information will almost certainly lead to poor performance, particularly ill-founded recommendations. Perhaps nothing is harder for a government official to live with than the ill-founded recommendations of other government officials. This is especially true when the other government officials have been authorized by Congress to make recommendations. In their own self-interest, the regulatory agencies should furnish the Board full information.

7. THE REGULATOR AND THE REGULATED

The regulatory agency and the regulated are in constant contact, covering the whole range of regulatory activities. Their communications are frequently oral; to the extent that these communications influence regulatory action, the record of the reasons for regulatory action is incomplete. The agency usually does not make available to the general public the information acquired in these private exchanges with the regulated. The general public does not have comparable contact with the agency. Many agencies discourage public participation in their regulatory programs; few encourage it.

All communications between the regulatory agency and those subject to its jurisdiction should be available for inspection by the general public-not only as a matter of legal right, but as a matter of philosophic bent. To prevent development of a cloistral relationship between regulator and regulated, the regulator should bring public participants into the regulatory processes and use their knowledge in examining the validity of representations made by the regulated. The regulator and his staff should avoid any relationship with the regulated which would compromise their freedom of action.

The regulatory agency should communicate with the regulated in writing and encourage the regulated to communicate in writing. The agency should summarize in writing any oral communications which it may receive and then treat the summary as it would treat a written communication. Written communications minimize misunderstandings, make information available to all members of the staff in readily usable form, and provide a full and accurate account of the factual basis upon which regulatory action was taken.

Persons subject to regulation often ask that they be permitted to make off-the-record comments about regulatory proposals. Neither the regulator nor any member of his staff should listen to any persons presentation, briefing, or argument on any regulatory proposal, unless that person is willing to have his comments put in writing and subjected to public examination. The regulator plays the patsy when he bases regulatory action on off-the-record information (except that which is required by statute to be withheld from public disclosure). The regulator needs all the help he can get in examining and determining the validity of information. The process is difficult enough with all information exposed to public view; secrecy makes it impossible.

Those subject to regulation seek out the regulator and his staff and keep them informed of all information and events which are favorable to the wishes of the regulated. There is little comparable presentation of information and events which are unfavorable to the regulated. Regulations are best developed in proceedings which test the validity of all representations, through use of diverse sources of fact and expert opinion. The regulator should, through a semi-independent segment of his own staff or through outside consultants, examine the validity of representations and develop alternate positions. To do this, he must have independent sources of information and expertise. The regulator can develop these sources by getting the active participation of such non-regulated groups as labor unions, scientific societies, consumer groups, and other government agencies.

It's a rare day when someone whom he regulates doesn't tell the regulator that he doesn't have to worry about some problem, that "we'll take care of it, because we're as interested in safety as anybody." When he hears this, the regulator must remember that the public is more interested. Congress made that determination in the first place when it established the agency, because the unregulated activity was not producing an acceptable level of safety. And Congress reaffirms the determination every year when it appropriates money for the agency. However great the regulated industry's interest in safety-and the

protestations are not feigned-the regulator cannot accept that interest as a discharge of his independent responsibility.

Many regulators are comfortable with a peas-in-the-pod relationship with the regulated. With a vacuous “we’re both interested in safety,” some regulators speak with pride of their partnership with the regulated. The closer the agency and the regulated get to a partnership, the more regulated persons will be able to impose upon the regulator with whispered communications, not subject to public view and rebuttal. But that is the inevitable result of partnership. If you can’t trust your partner, whom can you trust? You wouldn’t want to jeopardize a fine relationship by revealing secret communications intended only for partnership ears, would you? And how can we speak freely, unless we’re confident that partnership information will be kept within the partnership?

The regulator who admits the regulated to partnership in his regulatory activities has abandoned the public. In a partnership, differences are negotiated between equals and decisions are mutually acceptable. A partner gives up his right of unilateral action in areas of partnership interest. Regulations do not protect the public when they require the regulated to do only that which the regulated, in the position of coequal bargainer, is willing to agree to do. Only unilateral action by the regulator can require regulated industries to do that which they are not willing to do. Congress had delegated to the regulator the responsibility for protecting the public. He cannot share this responsibility with those whom he regulates. Besides, it is not seemly for government to bargain over the welfare of the people.

The regulator and his staff should not take these comments as advice to shy away from contact with the regulated. On the contrary, the public interest is best served by an unrestrained exchange of information. What the regulator and his staff must avoid is a relationship which leads them to bargain away, promise away, or otherwise compromise their right to govern. In particular, they should not accept gifts or favors; no matter how small, these will inhibit their freedom of action.

8. THE REGULATOR AND OTHER PUBLIC AGENCIES

Many states, municipalities, and other public agencies base their laws and regulations on federal standards. This poses a problem when the federal regulations are changed.

Federal regulatory authorities should not forego needed regulatory action, even though inconvenience may result to other governmental agencies. Federal regulatory authorities should involve other governmental agencies early in the federal rulemaking procedures, so that they will have time to make such changes as may be required in their own laws and regulations.

To illustrate the problem, assume that federal regulations for interstate shipment and a state regulation for intrastate shipments both require a safety relief device for cylinders charged with zyn, a compressed gas. Then assume that a study shows that the hazard to the public is less when zyn is shipped without a safety relief device. If the federal regulation were changed and the state regulation were not, a wholesaler receiving an interstate shipment would not be able to deliver it to retailers within the state.

For another illustration, assume that (for some reason lost in antiquity) federal regulations classify chlorine as a compressed gas. Then assume that a toll road authority permits a truck with a "Compressed Gas" placard to use its facilities, but prohibits a truck with a "Poison Gas" placard. Then assume that a study shows that chlorine should be classified as a poison gas, which would require a "Poison Gas" placard. If the federal regulation were changed and the toll road regulations were not, trucks carrying chlorine would no longer be permitted on the toll road, even though the hazard on the toll road would not be different because of changing the placard. The "Poison Gas" placard does not create a hazard, it only warns the public of the existence of a hazard.

Regulated groups frequently oppose proposed federal regulation for fear that a change in federal requirements will result in some problem with state or local government agencies. Federal regulators should disregard this argument. The federal regulations protect the whole public, while non-federal regulations protect only some segment of the public. When there is a conflict between the needs of the whole public and some lesser segment of the public, the needs of the whole public must be met.

The federal regulator should take into account the need for consistent regulations by all levels of government. Industry cannot serve the public when it is subject to conflicting laws. The federal regulator should keep other government agencies apprised of his plans and projects, so that they may know in advance that federal regulations may be changed. Then he should provide a long enough lead time, between adoption of a regulation and the time it becomes effective, for nonfederal agencies to make necessary regulatory changes.

The federal regulator must adopt the regulations which are needed for the protection of all the people. He cannot fail to act, even when his action inconveniences other agencies or those who must comply with the new requirement. He should minimize the inconvenience through coordination, but he cannot fail to act.

9. THE REGULATOR AND THE PUBLIC

Most regulatory agencies do no more than the law requires in involving the general public in the regulatory processes, but actively seek the participation of those who are subject to regulation. Many agencies are reluctant to make information freely available to the public, though they usually are willing to share information with those whom they regulate. There are statutory prohibitions on revealing some kinds of information (e.g., trade secrets), but agency practice usually is more restrictive than the law requires.

The regulatory agency should actively seek public participation, early and often, in the regulatory processes. The public should have access to all information in the possession of the agency, excepting only the work papers and in-house memos of the agency staff. Information which should be freely available to the public includes accident reports, investigation reports, correspondence, and memos of formal and informal meetings. The Freedom of Information Act (5 U.S.C. 55) requires that much of this information be made available upon formal request. The agency should make it all freely available, except that which is prohibited by statute.

Regulatory agencies perform a public function. That function can best be performed in full view of the public. Except where the national security is involved, there is no reason for a capable and honest regulatory official to be secretive about his actions and the reasons for his actions. The only regulatory officials who need hide behind secrecy are the incompetents who hide their blunders, the malefactors who hide their wrongdoings, and the timid or lazy who would rather deal privately with the regulated than wrestle with conflicting information and contending forces in open regulatory procedures. Until the day that regulations are developed in open procedures in full view of the public, the public will be fully justified in questioning whether it is well served.

Those subject to regulation frequently ask regulatory agencies to withhold information from the public. Since regulated groups publicize the favorable information, only the unfavorable information is withheld from the public-and from those who review the agency's actions. Remembering that the regulator is charged with protecting the public, should the dealings between regulator and regulated be kept secret from the public? What are the motives of the person who contends that the public is not entitled to know all that the regulatory agency and the regulated groups know about each other? Only when it has that information will the public be confident that its agencies are serving its needs.

Participation of the general public contributes to the validity of regulatory processes. In fact, the regulator cannot claim a valid program unless the public does participate. The regulatory staff will undoubtedly prefer to deal only with regulated groups, because "that's where the knowledge is; besides, they understand the problem." Participation of regulated groups in the regulatory processes is not altruistic. On the contrary, it is palpably self-serving, as it should be. The agency functionary who thinks otherwise misleads himself. Information furnished by the regulated will be useful in the regulatory processes only to the extent that it is examined and verified by sources which are non-regulated. These non-regulated sources are in the general public. It behooves the regulator, in his own self-interest, to seek all the knowledge and advice he can get-and to require his staff to develop it for him.

C. ORGANIZATION AND ADMINISTRATION

10. THE REGULATORY STAFF

The regulatory staff develops the notices of proposed rule making and the regulations which the regulator issues. The quality of the regulatory program depends in large part on the quality of the staff work. Sometimes a regulator, running jet age programs with bronze age techniques, will issue a regulation on the basis of “experience and judgment” or some equally amorphous substitute for legitimate staff study.

The staff should submit a notice of proposed rule making to the regulator with a staff study which recites the facts which define the problem, states the problem, develops alternative solutions for the problem with an analysis of the effectiveness and the technical feasibility and economic practicability of each alternative, and recommends the preferred solution with the reasons why this solution is better than the other alternatives. When the staff submits a final regulation for signature, the study should summarize and evaluate the public comment received in response to the notice of proposed rule making and show how the public comment was taken into account in developing the final regulation. These considerations should be summarized in the preamble which accompanies the notice of proposed rule making or the regulation.

The regulator reviews the staff study to determine whether he should issue the notice or the regulation. When considering issuance of a regulation, he also reads the public comment on the notice and checks whether the staff has taken public comment into account in developing the regulation. Remembering that the regulator performs a delegated legislative function when he issues a regulation, the staff should make a proper legislative record. The preamble to the regulation is analogous to a legislative committee report; it states the reason for, and the effect of, the regulation. The public docket is analogous to the whole legislative history; it contains all the information upon which the regulator relied in issuing the regulation. The staff must see that the public docket (information freely available to the public, in whatever form it may be kept by the agency) contains all this information, so that the whole basis for his action will be public.

Why do regulators sometimes accept and act on inadequate staff work? In some cases, this may be due to the lack of enough staff to do a thorough job. Since a prime function of a regulatory agency is issuing regulations, this may show an improvident allocation of manpower. But the principal reason seems to be the regulator’s lack of confidence in himself, his staff, or both. By relying on “experience and judgment” the regulator is on safe ground, because he and his staff profess more experience and judgment in his specialty than anyone who might review his programs. Further, experience and judgment cannot be quantified and analyzed by anyone reviewing his programs and seeking to determine the validity of the regulations. Stating the facts and giving the reasons for his actions would make it easy for others to check his performance, so his lack of confidence leads the regulator to evade review-at the price of a bungled program.

The regulator will get away with bungling as long as he is permitted to get away with the “experience and judgment” dodge. Those who evaluate a regulatory action should be able to look at the staff study and find whether the regulator requires his staff to know the sources of information, accumulate all pertinent information, and use the information in a logical way in defining the problem and devising a regulatory solution, particularly in exploring alternatives.

The object of adequate staff work is to assure valid regulatory action, not to nail the regulator for his mistakes. But human nature being what it is, a system for spotting mistakes is a major factor in

preventing mistakes. The regulator should require proper staff work from his subordinates, so that he may check the validity of their recommendations and thus be sure that he takes informed action. Higher executive authority and Congress should require the regulator to state-publicly and fully-the reasons for his regulatory actions, so that they may check the validity of his performance.

Another reason the regulator should require his staff to do good staff work is that it will prevent them from blindly perpetuating the errors and inadequacies of the past. The experience part of the “experience and judgment” syndrome encompasses the errors and inadequacies of the past. They will continue to be a part of that experience until consciously questioned. There is no need to reinvent the wheel every time a wheelbarrow is designed, but there is need to examine the design components closely enough to raise a question as to the efficacy of a square wheel.

11. PUBLIC COUNSEL

Regulated groups constantly bombard the regulator and the regulatory staff with information and recommendations for action (or inaction) which the regulated groups want. There is no such assiduous presentation of other information and recommendations. Few regulators make a consistent effort to examine the validity of pro-regulated presentations and to develop other sources of information and advice.

The regulator should establish a public counsel staff, independent of the regulatory staff, to examine the validity of the pro-regulated information and recommendations. (Pro-public and pro-regulated are merely terms of convenience, a shorthand method of identifying contending forces; the contention is usually one of degree, since pro-public is not necessarily anti-regulated, nor is pro-regulated necessarily anti-public.)

The regulator needs a vigorous presentation of both the pro-public and pro-regulated positions. There is great inherent worth in having contending forces work at the collection and evaluation of information and the development of regulatory solutions to problems. Facts are usually best tested and conclusions best validated through controversy, the clash of opposing opinions; note that the word is controversy, not hostility. Without an independent staff to contend with the regulated groups, the regulator cannot be sure that all the information and conclusions have been examined and questioned and that the alternatives have been developed and considered before the regulatory staff offers him a regulation to sign. The staff organization of most agencies does not provide for the controversial approach, in fact, the organization usually does not even permit it.

The regulatory staff finds itself in a compromised position when it is controversial in its dealings with regulated groups. Controversy with any affected group prejudices both the appearance and the fact of objectivity-and objectivity in staff work is essential to the integrity of a regulatory program. But diversity and controversy are also essential to the program, if the program is to have any vigor. So the regulator needs an independent staff, working with but not in the regulatory staff, to assure him that pro-regulated positions are questioned and that pro-public positions are presented. The chief of the public counsel staff should be of equal rank with other principal advisers.

The public counsel staff probably should not be a separate career unit in the agency. Employees who stay too long in this kind of function tend to lose their perspective, forgetting their affirmative pro-public purpose and lapsing into negative anti-regulated carping. They are also apt to lose touch with new developments in hardware and procedures, because opponents are characteristically reluctant too exchange information. A positive and aggressive approach could be assured by making the public counsel staff a testing ground for the versatility and initiative of the agency's younger employees who look like candidates for top management positions. The assignment, used in this fashion, would have the added merit of giving future executives a balanced view of the agency's function and functioning.

12. ACCIDENT AND INCIDENT REPORTS

Most regulations are based on semi-informed guesses. The regulator do not know the number and kind of accidents within their areas of responsibility, the causes-not the superficial, but the actual and controllable causes-of accidents, and the damage to the public resulting from those accidents.

The regulator should have an accident and incident reporting system which requires those subject to regulation to provide enough information about what has happened to permit the agency to project what may reasonably happen. For an agency concerned with transportation safety, the system should be designed so that the regulator can determine:

- The number and kind of accidents which are occurring in the activity subject to regulation;
- The number of persons killed and the number seriously injured in these accidents;
- The amount of property damage resulting from these accidents;
- The manner in which accidents result in death, personal injury, or property damage;
- The cause or causes of these accidents; and
- The relationship, if any, between each of the various causes of accidents and the kind and severity of the resulting injury to person or property.

The regulator must make a number of critical decisions in the process of identifying controllable causes of accidents, defining safety problems, determining priorities among problems, and developing optimum cost/benefit solutions for priority problems. As in all decisional processes, the regulator's decisions are no better than the information upon which they are based. Good decisions depend upon good information. The regulator may draw upon many sources of information, but all other sources combined are not as important as detailed accident information. The regulator should require the regulated to report 1) each accident which results in unacceptable harm to the public, such as death, serious personal injury, and significant property damage and 2) each incident which is statistically significant, although it does not result in harm to person or property. The reports should be on a standard form so that the information will be suitable for automatic processing.

Accidents result from recurrent causes, some controllable and some not, with statistically determinable frequency. The recurrence of death, personal injury, and property damage also can be determined statistically. If the regulator had complete information about all prior accidents, he would be able to make a projection of the statistical probability of future accidents, their causes, and resulting injury to the public. But most agencies have neither complete information nor systems for gathering information. Their rudimentary accident reporting systems seem designed to gather information about the damage resulting from the accident-deaths, personal injury, and property damage-rather than about the cause of the accident. Information about resulting damage may enable the agency to answer inquiries about today's headlines, but it will not help the agency to prevent tomorrow's headlines.

An accident reporting system will enable the regulator to identify problems, determine which problems need priority attention, and allocate resources to priority projects. Without statistical analysis as a basis for setting priorities, the regulator has to rely on guesswork, influenced by the latest headline. Until he has enough statistical information to give him confidence in his priorities, confidence based on a

demonstrably sound accumulation of information, the regulator will respond to headline accidents to the detriment of his overall program. The regulator never has a staff large enough to do all the things which should be done, so he must establish priorities. Those priorities can better be determined by statistical probabilities than by a weathervane response to the most recent accident.

The regulator must have independent information so that he can take independent action. Without an independent source, the regulator will have only that information which is voluntarily submitted to him. This is not satisfactory, because no person can be expected to volunteer unfavorable information about anything he does, especially to a regulatory agency. The regulator cannot rely on volunteer sources of information. He can rely only on information which is his as a matter of right, which he has demanded of the regulated, and which he can require the regulated to furnish.

When creating safety agencies in recent years, Congress has required the agency to make accident reports available to the public. However, left over from a more benighted age, there are still many prohibitions against public access to this information. Congress should amend these statutes to require all agencies to make all accident reports available to the public. Leaving philosophic considerations aside, there are two practical reasons for making the information public. One, the reports will be more accurate, giving the agency better information. The person making the report will make a more accurate report, knowing that members of the public-including employee unions, with a legitimate interest in the safety of the employees-will be able to look at the reports to check accuracy. Two, the agency will be more diligent in solving the safety problems identified by the reports, knowing that the public-including the press, with a legitimate interest on behalf of the public-will be able to look at the reports to check agency diligence. Those who oppose making the reports public advance two principal arguments. One, the person making the report will be more willing to give the agency information, if he is assured that it will not fall into "unauthorized" hands. Since the agency's regulations require the report, he has no option about giving the information. Two, the person making the report should not be required to furnish information which would be made available to a plaintiff who is suing him for an injury received in the reported accident. This argument lost its practical validity when gamesmanship in civil litigation was replaced by modern discovery procedures.

An agency is better able to serve the public when it knows as much as the regulated about accidents. The public is better able to assure itself of good service when it knows as much as the regulator knows about accidents. Maybe this is the reason some agencies are so reluctant to make information available to the public.

13. DELEGATING AUTHORITY

Many regulators sign regulations without knowing anything about the particular regulation, maybe without even knowledge of the general subject being regulated. They sign in reliance on staff advice, accepting staff initials on the paper's edge in lieu of personal knowledge of the paper's contents.

The regulator should not sign a regulation unless he is personally convinced that the regulation is valid. The head of an agency should delegate signature authority to subordinate officials to the extent necessary to ensure that each part of the agency's regulatory function is performed by someone who has the time personally and knowledgeably to perform it.

The head of an agency is responsible for all agency acts, but this does not require him personally to perform each act. The first principle in management is that the head of an organization can best do his job by parceling out the organization's functions among his subordinates and then supervising their performance. This principle applies as well to regulatory agencies as to other organizations. And it applies as well to the issuance of regulations as to other agency functions.

Sometimes the head of the agency signs all regulations because he believes that protocol requires his signature, that somehow his signature lends weight to the regulation, even though he hasn't the vaguest notion as to the validity of what he is signing. Or maybe the head of the agency has a personality problem and needs to feed his ego by wielding his pen and making law. Whatever his motive, the regulator is play acting when he signs a regulation without personal conviction that the regulation is valid. And the conviction must come from the regulator's own intellectual effort, not from reliance on an encrustment of staff initials.

Good management practice requires the head of the agency to delegate to others those regulatory functions which he does not have time to perform personally. The delegation should go far enough down in the organization that the person signing a regulation will have been able to:

- Monitor accident and incident reports to identify emerging safety problems;
- Supervise the staff as it develops a regulatory project, first making sure that the problem is properly defined and then that all reasonable alternative solutions are considered;
- Study the public comments, received in response to the notice of proposed rule making, and make sure the staff takes the comment into account in the staff study; and
- Determine that the optimum solution to the problem is the regulation which he signs.

If the agency is of any size at all, the head of the agency should probably delegate all signature authority, since he would not have time to perform any of it personally.

"How can I trust my subordinate with the responsibility for making laws?" With this rhetorical question, the head of an agency explains his retention of signature authority. The question advances an argument which is based on an unsound premise, because he does-in all practical effect-trust his subordinates to make laws. When the head of an agency signs a regulation without personal conviction as to its validity, the signing is an act of trust. He has trusted a subordinate to determine the need for, and the contents of, a regulation, but he has not made the subordinate responsible for it. The person who performs a function should be responsible for it; in a regulatory function, responsibility is in the person who has signature

authority. Thus the real question is, how can the head of an agency trust a subordinate to perform a regulatory function without making him responsible for the performance? It is conceptually wrong for the signature on a regulation to represent no more than the signer's blind faith in his staff. The signature should signify personal responsibility for the regulation.

In addition to fixing responsibility for issuance, delegation of signature authority eases the subsequent review, which the head of the agency must make from time to time. The person who signs a regulation has some degree of commitment to it, even a person who knows nothing about it except that it was issued over his signature. And he will have a defensive attitude about it, if its validity is challenged. The head of an agency must review all aspects of agency performance, including the individual regulations. He should not prejudice his overall review by making piecemeal commitments to individual parts of the program, particularly when the commitments are not knowledgeably made.

D. DEVELOPING REGULATIONS

14. ADOPTING INDUSTRY STANDARDS AS REGULATIONS

Many regulatory agencies, some openly and without apparent shame, adopt industry standards as their safety regulations.

The regulator should develop his own regulations to solve the problems which he has defined; he should not adopt industry standards as regulations.

As used in this chapter, “industry” includes all industrial companies which are engaged in activities closely enough related to be covered by an industry standard. An industry standard is a collection of recommendations, written by a non-government group, covering such things as specifications for making and maintaining hardware, training and qualifying workmen, and operating procedures.

Standard-writing committees, usually sponsored by professional societies, are composed of representatives from industry, suppliers of goods and services to industry, and a variety of non-industry sources such as college faculties, research institutions, non-profit foundations, and government agencies. The professional societies and non-industry participants object to having their work product described as an industry standard. Their objection is valid in the literal sense of the terms, but the usage is appropriate in this chapter to point up the facts that industry has a major voice in developing the standard, the standard is developed for the benefit of industry, and industry has the ability tactically to prevent adoption of any recommendation which it does not want included in the standard.

Industry standards are usually specific how-to-do-it documents, based on yesterday’s technology and techniques. Based on the cumulative knowledge and experience of experts in industry and related fields, they advise industrial companies on accepted ways of performing their activities today. They do not purport to accommodate tomorrow’s technology and techniques. However, since they are only advisory, the individual companies are free to experiment with new ways of doing things. When the experts on an industry standard-writing committee are satisfied that experience has shown the worth of a new way, they will then incorporate it into the standard. Thus the industry standard recognizes and recommends that which experience has shown to be good, while permitting experiment and innovation.

Consider what happens when the regulator adopts such an industry standard as a regulation. That which was designed as a recommendation becomes a legal requirement. Anything new or different will have to be accommodated by some sort of special permission. By limiting the regulated companies’ ingenuity and initiative in developing new technology and techniques, a regulator probably does a disservice to both safety and economy when he adopts an industry standard as a regulation. An example of the stultifying effect of this kind of regulation is found in the limitations which municipal building codes put on innovations by the construction industry.

Assuming the regulator hasn’t the capacity to develop his own regulations, should he then adopt industry standards? Does adoption of an industry standard as a regulation contribute more to safety than no regulation at all? Possibly so, but the benefit is unacceptably marginal. The regulator’s adoption of an industry standard will require regulated companies, which might not otherwise voluntarily comply, to meet the standards which the preponderance of experts in industry and related fields have agreed upon. This is the only benefit, but not the only effect.

When the regulator adopts an industry standard as a regulation, the regulation may have the anomalous effect of shielding regulated companies from liability to the public. To illustrate, assume that a chemical company ships a poisonous liquid in 5-gallon containers made of 24-gauge steel sheet, complying in all respects with a written standard. Then assume that one of the containers is punctured in the normal course of transportation on a truck, the truck driver dies as a result of getting a few drops of the liquid on his skin while unloading the shipment, and the heirs of the truck driver bring an action for damages against the chemical company. If the shipment were made under an industry standard, compliance with the standard would not be a defense for the chemical company, because the court would inquire whether the company was negligent in using such a thin-skinned container for such a dangerous product. But if the shipment were made under a regulation, compliance with the standard probably would be a defense for the chemical company, because the court would not inquire whether the company was negligent in using a container which the regulation authorized for that poison. Thus, when the regulator adopted the industry standard as a regulation, he gave the regulated company a defense against the consequences of its own acts.

The regulator misapprehends his role when he treats government regulation as an extension of industry self-regulation. In a well-conceived regulatory scheme, the demarcation between government regulation and industry standard would be clear. The regulations should prescribe what industry must do by stating, so far as possible, the level of performance which it must meet, leaving industry free to develop the specific means of meeting the prescribed level of performance. Regulations should prescribe what; industry standards should describe how. When the regulator understands his role and states the requirements in terms of performance standards, government regulations and industry standards serve distinct and complementary purposes. To the extent that the regulator misapprehends his role and states the requirements in specifics, the distinction is blurred-with the inevitable result that the regulator will start adopting industry standards as his regulations.

Industry standards are developed by knowledgeable people who contribute their time and talent to this useful community purpose. When not conceived as embryonic regulations, these standards can serve a number of good purposes. In many instances, they have produced an acceptable level of safety, so that there is no need for government regulation. There is no question that most industries have more detailed knowledge and experience than the regulatory agency. This talent should complement the agency's regulatory effort, not supplant it.

15. REGULATORY OFFICIALS IN NON-GOVERNMENT GROUPS

Officials of regulatory agencies frequently participate as members of non-government groups which are concerned with the processes by which regulations are developed, adopted, and enforced. When a regulatory official participates in such a group, he frequently finds himself in the paradoxical position of having to take action as a government official on a recommendation which he helped a non-government group to develop.

An official of a regulatory agency should not be a member of any group which has non-government members, if the group:

- Participates in developing any proposal which may later be considered by regulatory agency;
- Participates in rulemaking processes by formally commenting on notices of proposed rule making or informally reviewing drafts of regulatory papers; or
- Develops industry standards for complying with regulatory requirements.

Although the participants are both industry and non-industry, these groups should be thought of as “industry” groups for the same reason “industry” standards was appropriate in the preceding chapter, to reflect the extent and vigor of industry participation. Any long-established group with both industry and non-industry members is apt to reflect industry views. Industry participants have the talent and incentive to take the dominant role in any non-government group which deals with the regulations to which their companies are subject. And if industry participants do not get the dominant role, their self-interest will lead them to quit the group. A company does not profit by subsidizing participation in a volunteer group unless the group’s efforts serve the company’s purpose.

Industry participants seem to have no trouble understanding that the group draws its strength from the participants and that each participant surrenders some of his independence to the group. Unfortunately, many regulatory officials do not seem to grasp the group/member relationship, to realize that their participation lends the prestige of their offices to the group’s recommendations, to perceive the group ethic which requires a compromise of independence as a condition of participation. If a regulatory official does not understand the dynamics of group action, he is ill-prepared to participate in group activities; if he does understand, he is ill-advised to participate.

Assume that the regulator personally participates as a member of the industry group, opposing some and favoring other of the proposals which the group later recommends to him for regulatory action. What can the regulator do about a recommendation with which he disagreed during group discussion? He knows the appreciable differences in purpose and procedures between the industry group and his agency. In its decisional processes the industry group was not subject to the procedural safeguards prescribed for regulatory actions; the public did not participate in the group’s decision making; the public has no right of access to the group’s files and deliberations as a means of evaluating the recommendation or examining the group’s motives; and the group is not accountable to any public authority. What should the regulator do with a recommendation out of this background? On the one hand, he cannot in good conscience take an action which he personally believes to be wrong. On the other hand, he may lose credibility as a member of the group, if he rejects in his sole role as regulator a proposal which he could not defeat in argument as a member of the group.

The regulator cannot even take comfort in acting favorably on a group recommendation with which he agreed during group discussion. He cannot be proud of committing himself to a position at a preliminary step in the regulatory process. The regulator cannot properly commit himself until he has gotten all the information which is available from all sources. Once he has committed himself, he will tend to seek only those facts which buttress his position and his staff will be dissuaded from a vigorous search for other information and points of view. This is more apt to be so when the regulator has stated his position as an advocate in an argumentative situation. To avoid commitment or appearance of commitment, the regulator should never express an opinion on a pending regulatory matter, even for the sake of argument, until the time for definitive action. His staff members may enjoy the luxury of commitment and argument, but not the regulator.

If the regulator is a passive member of the group, “just sitting in to get a feel for the problem” as it is usually described, his participation is still against public interest. He is subjected to round after round of industry argument, without the safeguard of hearing opposing views. Some regulators probably delude themselves that they are too strong-willed to be influenced in this way. Maybe so, but those who believe that should ask themselves why industry groups persistently try to get them involved.

Assume that the agency participant in an industry group is not the regulator, but a member of his staff. To whom does the regulator turn for independent advice? And he would certainly need independent advice, because staff participation in industry group decision making is subject to the same vices as is the regulator’s participation. Perhaps he should ask a different member of his staff to advise him. But which is more competent, the one he sent to the industry group or the one he later asked to advise him? If he sends the more competent to the industry group, he cannot rely on the advice of the less competent. If he sends the less competent to the industry group, that representative will soon lose credibility with the group, because the group will find out that he is being second-guessed by a more respected employee. From any point of view, staff participation in industry groups militates against credible staff work. When the regulator lets his staff participate in industry group activity, he compromises the staff’s worth to himself. As he looks at each staff study, he will wonder about its validity. Is this independent staff work, or does it reflect the group’s discussions? Is his staff loyal to him and his policies, or does that loyalty run-even in part-to the group? The regulator will always know that the group has influenced the staff study, but he will never know how much.

There is no quieter, more genteel, less troublesome way to run a regulatory program than to act favorably on industry group recommendations. Because the path is easy, the regulator must guard against dominance, while maintaining communication. Industry influence is pervasive in any event, but it can be kept in perspective. The regulator must have the information and advice which industry can give to his program, but he should keep his relationship with the regulated industry on a par with his relationship with other sources of information and advice. He should never demean his office nor exalt industry’s position by being a first-person participant with the regulated industry in developing regulations. In the regulator’s lexicon, “we” must mean the regulator and the public, not the regulated industry.

16. NOTICE OF PROPOSED RULE MAKING

In the Administrative Procedure Act (now 5 U.S.C. 553) Congress prescribed general procedural safeguards for the administration of regulatory programs. The most important safeguard in safety programs is the notice of proposed rule making, which gives interested persons an opportunity to comment on the proposed regulation. The regulator must take the comments into account when issuing a regulation. Congress has not prescribed the detailed content of the notice. In most safety agencies the regulator signs the notice as well as the regulation. Some agencies submit a draft of a proposed notice for preliminary comment to those who will be subject to the proposed regulation, before issuing the notice of comment by the general public.

The regulator should delegate to one or more subordinates the authority to sign notices of proposed rule making. The notice should be issued early enough in the rulemaking process for the comments to play an affirmative part in shaping the final rule. The notice should never be submitted to the regulated before it is issued to the general public. As a minimum, each notice should:

- Define the problem which the proposal is designed to solve;
- Discuss alternative solutions which have been considered, comparing the technical feasibility and economic practicability of the alternatives; and
- Propose to adopt one of the alternatives as a regulation, with a discussion of the reason for choosing that alternative; or the notice may propose adoption of either of two alternatives which appear to be equally acceptable and ask for comment as to the relative merits of the alternatives.

The notice advises the public that the agency proposes to issue a regulation and asks the public to participate in the rulemaking by commenting on the proposed regulation. The notice does not commit the agency in any manner, except to study the public comment and then take such action as the regulator considers appropriate. That action might be to issue the regulation as proposed; issue a regulation which differs from the proposal, but is still within the scope of the notice; issue a new or amended notice, changing the proposal; issue a part of the proposed regulation, withdrawing the balance or issuing a new notice as to the balance; or withdraw the proposal. The agency should take final action promptly after getting public comment-within a few months at most. It is an adverse reflection on the agency when it delays the solution of a defined problem, after it has received all available information through public comment.

Since Congress has not prescribed in detail the content of the notice, a bare recital of the proposed regulatory language might meet the legal requirement, but it would not inform the public or stimulate much comment. Fortunately, most notices explain why the agency is making the proposal, but in many cases the explanation reads more like a sales pitch for the proposal than an invitation to comment on it. A notice should consist of a preamble, the text of the proposed regulation, and an invitation to interested persons to comment on the proposal. The format for the text of the regulation and the invitation to comment are rather cut and dried; the merit of the notice is in the preamble. The preamble should fully and candidly explain the background of the proposal (outlined above), admit any doubts as to the adequacy and validity of information, and point out any areas in which public comment would be particularly helpful. To realize on the potential of the notice, the preamble has to show the public that the agency wants help and then move the public to offer help. The potential for help is in the public, but it takes a good preamble to realize on that potential.

The notice must reach the public in order to generate comment. The only legal requirement for distribution is publication in the Federal Register, hardly a publication of general circulation. The agency has to distribute the notice by other means in order to get a response. The best means is to develop a mailing list of potential commenters and distribute the notice directly to them. The size of the list is limited only by the ingenuity of the agency staff in developing correspondents. The list will not serve its full purpose until it reaches all sources of information, including industry trade associations, labor unions, individual regulated companies, scientific and technical societies, universities, other government agencies, and knowledgeable individuals.

The public needs time to comment on the notice. There is a tendency on the part of many agencies to give the public only 30 days for comment. Although the agency may have spent a year or two developing the notice, there is too often an unseemly haste to get the comment phase over with. The comment period should be at least 60 days for even the most routine notice, longer for more complex notices. Since the purpose is to get public participation, the time for participation should not be so short as to discourage it.

The most common argument against publishing evocative notices is that “it would be foolish to waste time developing all the stuff for the notice.” This argument assumes that a notice can be issued on less information than that outlined above; that assumption is not valid. If the person who issues the notice has acted rationally, rather than intuitively, he will not have to do any additional work for the purpose of the notice. He will only have to tell the public of the steps he took in deciding to publish the notice. The request for comment should at least advise the public of the considerations which underlie the notice. The staff imposes on the public when it asks for comment on a proposed regulation while withholding information which would make that comment informative and worthwhile. The staff does a disservice to the regulator when it fails to develop information and worthwhile public comment.

The agency would issue the notice at an intermediate point in the decisional process. Of course, a tentative decision has to be made before there is any basis for issuing a notice, but the notice must be issued while the staff attitude is still flexible enough to make affirmative use of the public comment. If the decisional process has gotten beyond the tentative stage, there will be a predisposition to reject information which does not support the proposal. Over a period of time, this will discourage public participation and cut off a valuable source of information.

An agency should never submit a draft of a notice to a regulated group for comment before issuing the notice for comment by the general public. The agency and the regulated must freely exchange information and views at all times, but there is a distinct difference between exchanging information and views and giving the regulated a prepublication opportunity to censor a notice. The purpose of the notice is to give everyone, including the regulated, an opportunity to comment on the proposal. The public will quickly lose confidence in an agency which caters to the regulated by offering for public comment only those notices which have the prior blessing of the regulated. The agency must have both the capacity and the courage to publish notices and regulations without seeking the prior blessing of those whom it regulates. The lack of either capacity or courage foredooms the agency’s failure as a protector of the public.

Many agencies discourage public comment, preferring “informal coordination with knowledgeable people,” their euphemism for negotiation with those whom they regulate. Why doesn’t a regulatory staff encourage public participation in regulatory processes? Maybe the staff doesn’t want the file to show conflicting information and points of view, because the staff might then have to make some hard decisions, maybe even some decision which would be unpalatable to the “knowledgeable people.” Maybe the staff has not gone through the bothersome process of defining the problem, developing

alternative regulatory solutions, and making technical feasibility and economic practicability studies. Or maybe the regulator has somehow let the staff know that he prefers to act on intuition (masquerading as experience and judgment) and horsetrading with the regulated industry.

The notice should be signed by someone on the regulator's staff, rather than by the regulator himself. The notice is not a final decision; it is a request for help in making a final decision. The regulator should avoid even the appearance of commitment to the proposal at the notice stage, so that his final decision will not be prejudiced. The public will more readily accept the notice as a tentative decision and will be more interested in commenting on the notice, if the tentative nature of the notice is emphasized by having the notice signed by someone of lower rank than the one who will make the final decision.

Commenters frequently suggest that the regulator take some action which is beyond the scope of the notice. These suggestions should not be dismissed as gratuitous comments. Rather, they should be treated as petitions for rulemaking. Further, the preamble to the final action should acknowledge receipt and explain how the suggestions will be handled.

17. TECHNICAL FEASIBILITY

Regulators often propose, and sometimes adopt, regulations which require equipment or techniques which are not available or human skills which are not in adequate supply. Conversely, they may adopt regulations which are less effective than they should be, because they do not require use of the best hardware and procedures which can be developed.

The regulator should be a leader in his area of responsibility, keeping abreast of current technology and encouraging the development of ever-better hardware and procedures to raise the level of performance by those subject to his regulation. After identifying a problem, the regulator should require his staff to seek the widest possible participation in determining the technical aspects of the problem and developing a solution. The regulator should consider as technically feasible those things which can be developed with reasonable diligence.

Regulatory agencies are far from omniscient. They need all the help they can get on all aspects of their programs, including the technical features of problem definition and solution. The agency gets this help through means as varied as it has the gumption (and sometimes the budget) to devise. Few regulatory staff men err on the side of boldness in their search for technical knowledge, some because they cannot cope with documented information and differing views, and others because "there's no need to sweat it now that the regulated industry has given us this well-documented study which shows that there's really only one way to do it anyway." The regulator is entitled to better than that from his staff.

Whatever problem it may be considering, the agency can count on the regulated industry for help-information, studies, recommended solutions-in developing regulations. The general public is not so aggressive in sharing its knowledge, because the individual members of the public do not have the incentive. But there is technical knowledge in the general public, knowledge which the agency must seek out. To evaluate this input of information, the agency must have independent technical competence, both people and research facilities, though not necessarily in permanent employees and separate agency laboratories. Until the regulator identifies a continuing need for a particular kind of detailed knowledge, he should content himself with a permanent staff of technical generalists and have the detailed work done by consultants and contractors. Other government agencies are a good source of objective advice.

In determining what is technically feasible, in both hardware and human skills, the regulator is not limited to off-the-shelf hardware, historically proven procedures, and already-existing human skills. When the public welfare requires it, he can require industries under his jurisdiction to enlarge the horizons of knowledge and develop hardware, procedures, and human skills which are reasonably attainable. Those things are reasonably attainable which can be developed with reasonable diligence. The determination of the degree of diligence which is reasonable depends on the severity of the threat of harm to the public. The greater the threat of potential harm to the public, the higher the degree of diligence which the regulator may reasonably require of the regulated industries to minimize the threat to the public.

A regulated industry will need time to comply with any regulation which requires new or different equipment, procedures, or skills. The length of time will depend upon the availability of the new or different requirements, off-the-shelf items usually requiring less time than those which must be developed. A too short lead time requires a crash program for compliance, which may result in inferior products at unnecessarily high cost. Over the long haul, the regulator's program is usually better served by giving enough time for compliance so that the regulated industry can comply in an orderly fashion. In setting the time for compliance, the regulator should not rely on the representations of the regulated

industry; he should also consult with those who will supply the goods and services to the regulated industry. Once he has set what he believes to be a reasonable time for compliance, the regulator should not extend it without good cause. If the regulator gets a reputation for extending the time for compliance, the industries which he regulates will be less than diligent in meeting future compliance dates.

18. ECONOMIC PRACTICABILITY

Regulators usually do not make a cost/benefit analysis of regulatory proposals, probably because they do not develop cost and benefit data. Because “money cannot be a factor when human life is at stake,” regulators may hide their heads in the sand and fail to develop a factual record regarding the cost of proposed regulations. But they regularly and imprecisely take cost into account obliquely, because “it would take a pot of money to do that much training” or “that sure would take a lot of new equipment.” Like the ostrich, the regulator exposes his most unattractive feature when he sticks his head in the sand.

Cost is a limiting factor—in fact, the principal limiting factor—in any regulatory program. The regulator should openly and honestly take cost into account in setting regulatory standards. He should make a cost/benefit analysis of each proposed regulatory solution to a problem, despite the fact that he will frequently be comparing dollar costs with non-dollar benefits. The analysis is particularly helpful in choosing the best solution among alternatives.

To ensure the legitimacy of regulations, the various elements of the developmental process must be legitimate. To this end, the regulator must legitimize the discussion of cost and subject every proposed regulation to an informed cost/benefit analysis. Without a cost study, based on verified information, the cost factor cannot be known and the analysis degenerates into guesswork, particularly since informally submitted and unverified cost figures from the regulated industry must perforce be used if nothing better is available. The public is entitled to better government than that.

Cost is usually stated in dollar terms, but time may also be a cost factor. For example, the speedometer on a car and the speed limit on a highway are both safety requirements and both represent a cost factor, one in money (the out-of-pocket price of the speedometer) and the other in time (the loss in productivity resulting from lower speed). Time as a cost is harder to compute than direct money cost, but it is no less real and should be computed. Has anyone ever computed the difference in cost between the 65 mph speed limit on the limited-access highways in Virginia and the 75 mph speed limit in Tennessee? And the difference in benefit? If not, we have an example of governmental guesswork.

Difficult as it is to compute the cost of a regulatory proposal, it is child’s play compared to the computation of benefit. What is the value of a human life, when computing the projected benefit of a safety regulation? What is the benefit of lesser spills of petroleum products on navigable waters? What is the value of marine life saved from destruction? What of truly intangibles, such as esthetics? But the benefits must be computed. Admitting the difficulty of equating dollar cost and non-dollar benefit, the regulator must make a cost/benefit analysis, else his regulations will rest on guesswork. The regulator will find the analysis invaluable in choosing between alternative solutions for a problem.

In considering a proposed regulation, most people seem to think of the added cost of compliance as a net cost to the regulated industry. They do not consider the benefits which will result from the requirement. Accidents cost money; when there are fewer accidents, the cost of operations is less. The projected cost of a regulation should be reduced by the projected savings which will result. On a cost/benefit basis, the savings may be considered as either a decrease in cost or an increase in benefit. But it must be taken into account and will be taken into account when the staff routinely makes a cost/benefit analysis.

To illustrate, consider the cost of railroad accidents. The Federal Railroad Administrator told a Congressional committee in 1969 that railroad accidents were increasing at an annual rate of about 10% and that the cost of these accidents had exceeded \$258,000,000 in 1967. As the Federal Railroad Administrator develops safety regulations to reduce the number of accidents and minimize the damage

resulting from each accident, he has this substantial cost of unsafety to offset the cost of his safety requirements. Further, the cost of unsafety is an annual figure, available on an accrual basis to offset the cost of complying with safety requirements which may be one-time expenses.

In all industries, the cost of unsafety is high, but it is not known with any useful degree of accuracy. An agency's accident and incident reporting system should require each year a statement of the cost of unsafety by the companies subject to its regulation. The cost of unsafety for this purpose includes the losses resulting from all accidents which could have been prevented or mitigated by an exercise of the governmental power delegated to the regulator. Until he knows the cost of unsafety, the regulator will not have a part of the information necessary for a cost/benefit analysis of subsequent regulatory proposals. The regulator has to continually improve the accident reporting system until his figures on the cost of unsafety are so well articulated that he can calculate the cost of unsafety in relation to the particular problem with which the proposal is concerned.

19. GENERAL STANDARDS OR SPECIAL PERMITS

Some regulations require regulated companies to get specific agency approval for each item of equipment and each operating procedure used in regulated activities. These regulations usually give little guidance as to what the agency will approve and seldom set standards for approval. Other regulations are so narrowly drawn or stated in such specific language that regulated companies have to seek special permission for new or different activities.

Regulations should set general standards for the conduct of regulated activities, but should not prescribe detailed means of performing the activities. The regulations should be stated broadly enough to cover the full range of activities which the regulator deems to be in need of regulation. The regulations should not require a regulated company to get agency approval before using any equipment or changing any procedure.

This scene is repeated all too often, in all too many regulator's offices: There is this problem-not yet defined, but identified by newspaper headlines and Congressional comment...They're demanding action, so we must act...Never mind that we don't know what to do, we've got to do something...All right, lets require each regulated company to get our specific approval for equipment and procedures used in the problem area. The scene ends in activity without action, the hard-pressed regulator's tried-and-true dodge. He doesn't know what needs to be done and he hasn't the vaguest notion as to what he may approve when a regulated company proposes something, but never mind-it'll take the heat off today.

This bit of gamesmanship gets the agency off the hook temporarily-and it's harmless. Harmless? This seemingly innocuous regulation has an unseemly potential for mischief, a potential which will almost surely be realized. When a regulation requires prior approval of something, but does not set a standard for giving approval, it is the subsequent approval of the specific matter which actually sets the standard of conduct. Far from being innocuous, this regulation sets the stage for perversions of regulatory authority and evasions of the administrative procedures which Congress established to guard the integrity of the regulatory processes.

Agency approval of equipment and procedures gives the seal of government approval to the use of the equipment and procedures in regulated activities. No one can challenge the fitness of the equipment or the propriety of the procedures, except by filing a petition for rule making with the agency. If a regulated company, using approved equipment and procedures, injures an innocent bystander, the company can use the seal of approval as a shield against the injured person's claim for damages. In this event, the regulator will not have used his authority to protect the public, as Congress intended; rather, he will have used his authority to protect the regulated company. This perversion of regulatory purpose is discussed in Chapter 14, Adopting Industry Standards as Regulations.

Individual agency approvals of equipment and procedures are negotiated privately between agency employees and regulated companies, without public participation. This is an evasion of the procedural requirement that regulations (remember that the actual regulatory requirement is set in the individual approval) be issued only after notice of proposed rule making and opportunity for public participation. The lack of public participation means that action is taken on less than complete and validated information, since the applicant surely will not volunteer information adverse to his application. Further, since the approval authority is generally delegated to employees of considerably lower rank than the regulator, the practical effect of a series of approvals is that regulatory standards are set by employees who do not have the kind of staff support available to the regulator.

When regulations require prior approval but do not set standards for giving approval, the agency may publish in-house instructions to employees. The agency usually develops these instructions in consultation with industry, but without public participation. To the extent that these instructions set standards for giving approval, they have the effect of a regulation, so they should be adopted only after notice and opportunity for public comment. If he is to give approvals, the employee needs instructions, but the instructions should be published as regulations after notice and public comment. Better still, the regulator should publish regulations which set an adequate standard for the conduct of regulated activities, without reserving anything for private negotiation and approval. The regulator should be able to write better standards, with the help of his staff and the panoply of regulatory procedures, than one of his employees can negotiate in head-to-head bargaining with a regulated company.

Some regulations are written entirely in specifics, with every piece of equipment and every procedure individually prescribed. With this kind of regulation, the regulated companies must seek specific approval for each new or different activity, with all the vices noted above.

20. PERFORMANCE STANDARDS OR DETAILED SPECIFICATIONS

Most regulators state their requirements for equipment in terms of design and manufacturing specifications, rather than as performance standards. In many instances, specified pieces of equipment authorized to serve the same purpose have markedly different performance characteristics.

The regulator should set standards for equipment by prescribing first the performance standards which the equipment must meet and then the tests to which the equipment must be subjected to determine whether it meets the requirements. Performance standards consist of a quantified description of:

- The environment in which the equipment must be capable of operating, including those elements which would cause the equipment to deteriorate during the projected period of use;
- The functions which the equipment must be capable of performing and the projected period of use; and
- The integrity (strength and reliability) of the equipment, which will vary in relation to the degree of hazard to the public which would result from a failure of the equipment.

Tests consist of:

Exhaustive type tests, which may consist in part on engineering analysis, to determine whether the design concepts and manufacturing processes have produced a piece of equipment which meets the performance standards; and

Routine production tests to ensure that equipment coming off the production line meets type standards.

Design and manufacturing specifications usually are developed as industry standards and then adopted as regulations. They prescribe the materials, manufacturing processes, and quality control processes to be used in making the equipment. Regulators like to regulate by specification, because it is easy and precise—easy because it reflects yesterday's wisdom assembled and approved by the experts who establish industry standards; precise because it recites detailed descriptions of materials and manufacturing processes. But the regulator's assignment is to set the standards for tomorrow's activities, not memorialize yesterday's accomplishments. Despite the difficulty, the regulator should, wherever practicable, state his regulations in terms of performance standards, providing a regulatory milieu in which the public is protected while the regulated industry is free to innovate and make technological improvements.

Performance standards prescribe what a piece of equipment must be capable of doing after it is built, but not how to build it. The regulator must think in terms of performance, not processes. Thinking in terms of performance, the regulator tends to develop standards which will require that the equipment have the integrity to perform the function for which it is built. Thinking in terms of specifications, the regulator tends to tailor the standards for equipment so that the specified material of which the equipment is built can meet the standard.

Illustrations of this tendency are found throughout the hazardous materials regulations. Liquid poisons, some of which cause death when absorbed through the skin, may be shipped in a wide variety of containers, including steel barrels and drums, wooden barrels and kegs, and glass carboys in wooden boxes or plywood drums. Impact tests are prescribed for random samples of production runs of these

containers to determine their integrity. These tests relate to the characteristics of the material of which the container is made, not to the need to contain the poisonous contents. Steel containers must pass the test without any leakage, but glass carboys in boxes or drums pass the test if no more than 10% shatter. The regulator unquestionably tailored this regulation to fit the material of which the container was made, rather than the function which the container was to perform; after all, he would look foolish if he prescribed for glass carboys a test which glass carboys could not pass. This is the almost inevitable result of dealing in specifics.

Special permissions, specifications, and performance standards are not mutually exclusive methods of writing regulations; all three may be used by the same agency at the same time in different parts of its regulations. Of these three methods of writing standards for equipment, only performance standards are a valid exercise of regulatory authority, when adopted under open regulatory processes which involve the general public early and often in the regulatory processes. Special permissions-any individual authorization, whatever name the agency may give it-are almost totally lacking in validity, since each permission is an approval of an industry proposal, an approval given without public participation and usually without standards to guide the person giving approval. Specifications have some validity, since they are adopted after notice and opportunity for public comment, but they are usually based on industry standards which were developed without public participation. Since regulation by specification lacks flexibility, all subsequent innovations lack validity, since the regulator has to issue special permission for each new or different piece of equipment or type of procedure.

E. SECURING COMPLIANCE

21. EDUCATION

Many agencies are not aggressive in educating regulated companies and their employees about the requirements which regulations impose on industrial activities. They seem content to issue their regulations and passively wait for the word to trickle down to the people who do the acts affected by the requirements.

The regulator should distribute his regulations, without cost, to all companies (and individuals, when the requirement applies directly to an individual who is not an employee of a regulated company) subject to his regulatory control. The regulator should require regulated companies to establish training programs which will ensure that each employee performing a regulated function knows what the regulations require of him and how to do his job so as to meet those requirements. The regulator should develop means of publicizing his regulations, so that everyone subject to his regulations will know the regulatory requirements.

As soon as he issues a regulation, setting a legal standard of conduct, the regulator turns his attention to getting compliance with the regulation. Issuance of a regulation does not raise the level of performance by those subject to the regulation. It only sets a legal requirement which, if complied with, would raise the level of performance. It is compliance with the regulation-performance according to the standard-which produces the desired result.

The agency cannot depend on spontaneous compliance. Education is the bridge between issuance and compliance. The agency has to develop an educational program which will ensure that those who perform regulated functions know what the regulations require of them. The first step is to distribute all regulations free of charge to all companies (and individuals, where appropriate) subject to the regulation, so that there is no doubt about their being advised as to the existence of the regulation. The second step is to require each regulated company to have a training program which will educate each employee, performing a regulated function, as to the requirements of the regulations to which he is subject and how to do his job to meet the requirements. The individual employee must know how to comply with the regulations, because he performs the function.

Of the many products of his office, regulations are the regulator's most important product. He should merchandise this product with a vigor equal to its importance, consciously using merchandising techniques in presenting each regulatory requirement to those affected by it. The agency should cultivate the trade press, trade association and labor union publications, and scientific and technical society journals, as means of getting the message to the people who need to know. The agency should also seek out opportunities to do missionary work at trade association and labor union conventions and at the one-week and two-week courses which universities offer to middle management.

Our social structure is built on voluntary compliance with the law, but compliance presupposes knowledge of the law. While everyone is presumed to know the law, the regulator cannot rely on this presumption in the administration of his program. Thousands of people in hundreds of companies are probably involved in the industrial operations affected by a new regulation. It is vacuous to think that they will somehow intuitively know of a new regulation when it is published in the Federal Register. The regulator's issuance of a regulation has no practical effect until the individual people who perform the affected industrial operations know what the regulation requires them to do.

22. SURVEILLANCE

Some agencies do not have inspectors to monitor the effect of their programs, particularly compliance with the regulations. Others have inspectors who do no more than investigate major accidents and prepare enforcement actions on any violations which may be found in the course of the accident investigation.

The agency should have a force of field inspectors large enough to monitor the regulated industry's activities under the regulations and advise the head of the agency as to the adequacy of the agency's efforts. The inspectors should monitor regulated activities to find whether the regulations are adequate, whether the education program is adequate, whether enforcement action is necessary to secure compliance, and to identify problem areas which need priority application of agency resources.

Regulations are not self executing, nor are they self correcting. A force of field inspectors is the agency's link with the regulated, advising the regulated as to the requirements of the regulations and advising the regulatory staff as to the efficacy of the requirements. Without adequate observation of industry practice under the regulations and the resulting level of performance, the agency must operate on guesswork, usually wasting resources by overreacting to newspaper headlines and Congressional comment. The inspectors are primarily concerned with securing compliance with the agency's regulations, of course, but they should also be charged with the responsibility for reporting on any inadequacies or inequities which they find in the regulations. The regulations should be both adequate and equitable. The regulator should structure his whole operation to this end, particularly the points of contact with the regulated; no other part of his organization is as able to advise him on the practical effect of his regulations.

A good accident and incident reporting system is the cornerstone of surveillance, pointing the way to better routine surveillance and also indicating the need for special studies whenever there is a statistically significant bunching of events. Analysis of these reports shows the practices and procedures which result in accidents, pointing up the areas which the agency should monitor most closely and subject to special studies. Accident reports are a good means of identifying problem areas, but they should be verified on a sampling basis by on-site inspection by the field force.

The agency has to take care that its field inspectors do not lapse into a preoccupation with parochial concerns. Inspectors tend to think in terms of enforcement, because that is identified as a field function (a matter of group pride) and because they can quantify the results and document their work product (a matter of personal pride). Supervisors and employees alike want ways of demonstrating the results of their work—a laudable desire which the agency must take into account. The agency must structure the surveillance function so that results can be demonstrated by something more constructive than enforcement statistics. Enforcement is sterile, not creative, because it focuses on past errors, not on future performance. Some enforcement action is exemplary, of course, but each enforcement action is quite expensive in employee time, so the agency should be chary of time spent on legal actions. Since most agencies are limited in manpower, the agency should be careful to put its manpower where it will best serve the agency's overall purpose.

The best way to get the inspectors to work for the agency's overall mission is to provide him with incentives which relate to the overall concern. Every employee should have pride in his work and a means of measuring and demonstrating his accomplishments. Recognizing this, the agency must devise means of measuring accomplishments other than legal enforcement. This will require development of means of measuring accomplishment in terms of identification and definition of problems, improvements

in the regulations, development of industry training programs, and other affirmative steps toward accomplishing the agency's overall mission.

23. ENFORCEMENT

Some agencies think it improper to adopt a regulation unless they have the manpower to mount an enforcement program which will ensure that regulated companies will comply with the requirement. Some agencies think that emphasis on legal enforcement is the way to get compliance with the regulations.

The regulator should adopt those regulations which are required to protect the public, without regard for his agency's ability to enforce the requirements. The agency should then seek compliance with the requirements through a variety of means, of which enforcement is but one.

Every regulator has some means of legally enforcing his regulations with either civil or criminal penalties, as provided in the legislation setting up the particular program. The vigor with which the agency enforces its regulations depends upon a number of variables which are not within the control of the agency, such as the disposition of the regulated industry voluntarily to comply with the regulations, economic stability of the industry (experience has shown that a prospering business is less apt to cut costs on regulatory requirements), the resources which Congress has given the agency for inspection and enforcement, and the disposition of the Department of Justice to take legal action at the request of the regulatory agency. Though the agency has a large measure of initiative, it does not have complete control over its enforcement program.

The agency protects the public by setting standards for the conduct of industrial activities and then getting regulated companies to comply with the standards. These functions are interrelated, but not interdependent. The regulator has an obligation to set the standards, even though Congress may have given the agency no manpower for enforcement. The regulator must recognize that his primary duty to set standards is separate from, and not dependent upon, his ability to enforce the standards.

Even though the agency does not have enforcement capacity, the public will benefit from the improved performance which results from voluntary compliance. Spokesmen for industry trade associations frequently argue that "you shouldn't impose this burden on the responsible members of the industry unless you have the manpower to enforce it against the irresponsible members, because that would put the responsible members at a competitive disadvantage." Parenthetically, these spokesmen are never willing to name the irresponsible members of the industry group. This argument is based on an unwarranted lack of confidence in the initiative of the American businessman. His self-interest will lead him to find a way to blow the whistle on a competitor who gains an advantage by violating the law.

The prospect of public liability resulting from failure to comply with a regulation is an important collateral enforcement device-probably more effective than the rather sterile and predictable agency enforcement, because it is more dynamic. If a regulated company fails to comply with a regulation designed to protect the public, and if a member of the public is injured as a result of the failure to comply, the company will be liable for the resulting damage. The prospect of liability for damages will be a greater incentive for compliance than the occasional slap on the wrist which is all the agency can do in legal enforcement. Insurance companies have an interest in compliance on the part of their insureds, as a matter of minimizing liability, so the agency should enlist the aid of the insurance companies in securing compliance.

After issuing a regulation, the agency is interested in compliance, not enforcement. Enforcement is a means, not an end in itself. Since most of the regulated industry will comply with most of those regulatory requirements with which they are acquainted, the agency's emphasis should be on education

and surveillance, rather than enforcement. The agency's resources are probably misapplied if it spends as much as five percent of its inspectors' time on legal enforcement actions. But there is a need for regular and well-publicized enforcement action, as a club to get the attention of the mulish.

A WORD OF CAUTION TO THE CRITICS

A variety of official and unofficial agencies and individuals review and comment on regulatory programs. The comment is usually unfavorable, since few people bother to commend good work. And some fail to recognize it. In justice to the agencies, those who would criticize should first consider the inherent limits on a regulator's actions. This discussion relates directly to safety programs, but the principle should apply to all kinds of regulatory programs.

The regulator does not create abstract regulations in a social vacuum; rather, he seeks regulatory solutions to problems as they are seen in the light of the current social environment. Congress expects the regulator to perform his function in consonance with the general principles—admittedly ill-defined, but nonetheless real—under which other governmental social programs are conducted. In today's social environment, the regulator is expected to set safety standards which will keep the public as a whole free of unacceptable threat of harm; he is not required to protect every individual person from all possible harm.

Some level of harm to individual members is demonstrably acceptable to society as a whole. Congress did not act to establish safety standards for automobiles when the first preventable death occurred in an automobile accident. In fact, preventable casualties numbered hundreds of deaths and thousands of maimed bodies every week before Congress was moved to act. Millions of lives in this country are blighted by poverty, many to the extent of malnutrition and some to death by starvation, but we still have not committed the nation's resources to ending poverty.

Those who execute society's programs must recognize that the society they serve is not willing to spend its resources to ensure the safety and well-being of every individual member. Recognizing this, governmental programs are concerned with keeping the threat of harm to a level which is acceptable to society as a whole. The level of acceptability is determined in large part by contemplation (seldom legitimized by calculation) of the cost of reaching a higher level.

We emotionally profess to hold each human life beyond price, but our cost-limited social programs show the profession to be rhetoric-rhetoric which leads to unjust criticism of regulatory programs by those who fail to discern its emotional content. The regulator does not run an emotional program and should not be judged by emotional standards. He runs a governmental program and should be appraised by governmental standards.